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BEWARE: THE FARM CRISIS IS NOT OVER

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Spring's arrival heralds the annual regeneration of the farm community's hope and optimism for a better year. However, during the spring of 1987, this annual surge in optimism has been unusually vibrant because the farm crisis seems to be receding. Both net cash farm income and net farm income before inventory adjustment, which is more stable on an annual basis than the usually cited net farm income after inventory adjustments, established nominal dollar records in 1986 (Table 1). Furthermore, these two measures of farm income increased at compound annual rates of 11.7 and 16.8 percent respectively between 1984 and 1986, a sharp contrast with the 1978-1984 growth rates of 2.9 and 2.1 percent. In addition, farm debt excluding farm households, which totalled $199 billion on December 31, 1984, is currently forecast at $158 billion for December 31, 1987. Thus, while some farmers, especially those burdened by heavy debts, continue to experience difficult times, current trends in farm income and debt provide support for the current optimism.

However, we believe that, far from suggesting an optimistic future, the causes of the current optimism point to a continuation of the farm crisis. No one wants to think about a continuing farm crisis just when it seems relegated to the history books, but, to be honest, most farmers, agricultural policy makers, and agricultural economists were caught off guard by the emergence of the farm crisis during the early 1980s. We suggest no one should be caught off guard by its continuance. Therefore, we address the economic causes of the current optimism, the difficult times they foretell, and a few implications of the continuing crisis.

Economic Causes of the Financial Improvement

Interaction of three economic factors have underpinned the farm sector's financial improvement since 1984. The first is declining farm expenses. Total expenses including farm households decreased from $142 to $125 billion between calendar years 1984 and 1986 (Table 1). Reasons include (1) declining prices for production inputs -- the index of prices paid for production inputs on a 1977 basis declined from 155 in 1984 to 145 in 1986, (2) declining interest expense -- from $21 billion in 1984 to $16 billion in 1986 because of lower interest rates and reduced debt, and (3) declining use of inputs -- less intensive use of inputs per acre and fewer planted acres because of larger land set-asides and withdrawal of land from farm production altogether.

The second factor is government price and income programs. Direct government transfer payments to farmers plus net Commodity Credit Corporation (CCC) loans for grains increased from $8 to 20 billion between 1984 and 1986 (Table 1). As a statistical aside, CCC net loans are added to direct payments because, to farmers, CCC loans are a free put option to sell (to the government) at the loan rate. CCC loans are generally taken out when market price is less than the loan rate, and, thus, support the market price. Therefore, for a given year, government support for the farm sector include both direct income transfers and the price enhancing effect of the CCC loan program. An approximation of total government support can be obtained by adding net CCC loans to direct income transfers. Lastly, because a CCC loan more closely represents the sale of

a commodity (for a guaranteed minimum price) than a traditional loan, in the discussion which follows farm debt and assets exclude CCC loans.

The sum of government payments and loans basically remained constant in 1985 and 1986, but the composition changed. Net CCC loans declined from $11.8 to $8.3 billion while government payments increased from $7.7 to $12 billion. This changing mix is projected to continue in 1987 with net CCC loans currently estimated by the U.S. Department of Agriculture (USDA) at $0.5 billion and direct payments projected at $15-17 billion. The shifting mix reflects (1) the increase in unpaid land set asides contained in the 1985 farm bill and the 15 percent paid land diversion in effect for 1987 feed grain crops, both of which reduce the amount of surplus grain that potentially becomes collateral for CCC loans and, most importantly, (2) the differential reduction in loan rates and target prices set forth in the 1985 farm bill.

Under the 1985 farm bill, the Secretary of Agriculture may reduce loan rates for feed grains and wheat by up to five percent per year. The Secretary also has discretionary authority to reduce loan rates an additional 20 percent per year. This discretionary authority is applicable only for a given year and must be reinvoked the next year. For these commodities, the maximum possible reduction in loan rates was invoked during the 1986 and 1987 crop years. Lastly, for cotton and rice, a marketing loan was established by the 1985 farm bill.

In contrast to loan rates, the Secretary of Agriculture can not reduce target prices until the 1987 crop year for cotton and rice and the 1988 crop year for feed grains and wheat. By 1990, the last year of the 1985 farm bill, target prices can be reduced by 9 to 10 percent depending

on the commodity. Thus, the differential timing and potential magnitude of loan rate and target price reductions provided in the 1985 farm bill and invoked for the 1986 and 1987 crop years has resulted in a projected doubling of direct government payments between 1984 and 1987.

The third economic cause of the farm sector's improved financial health is the profitability of the livestock sector. The livestock sectors's profitability can be approximated by the ratio of livestock and livestock product prices to feed grain and hay prices, the major input into livestock production. This ratio has surged from 1.01 in 1984 to 1.11 in 1985 to 1.41 in 1986 to 1.75 during the first five months of 1987. As a comparison, the ratio averaged 1.10 over the 20 year period 1967-1986. The sharp increase since 1984 reflects in large part the coincidence of low production/high price points in the pork and beef production cycles and the policy decision to reduce feed grain loan rates. Reflecting the increasingly profitable feeding margin, net cash income of poultry, dairy and meat animal farms increased from $16.8 billion in 1985 to a preliminary USDA estimate of $20.6 billion in 1986, a 23 percent increase.

In summary, the 1985 farm bill permitted the Secretary of Agriculture to reduce loan rates and target prices but moderated the potential size and rate of decline in target prices relative to loan rates. The farm bill also increased land set asides requirements. These policy changes in combination with good weather, a decline in oil prices, and lower interest rates substantially improved the profitability of the livestock sector and supported the income of crop farmers through increased direct government

payments and through lower input prices, which were caused in part by reduced demand for inputs due to increased land set asides.

Why the Financial Improvement and thus Current Optimism is Temporary

What does the future hold for the three economic causes of recent financial strength? As concerns production expenses, the large increase in government land set-asides and permanent exit of land during the 1986 and 1987 crop years appears to have nearly balanced 1987 production and consumption. Thus, the need for additional land set-asides or exit of land from the farm sector should, at the least, be smaller in the future. In addition, the April 1987 survey of input prices found that prices for production inputs were slightly higher than in April of 1986. Further declines in input prices may occur because of delayed reaction to the decline in oil prices since 1985, but current evidence suggests the decline in input prices will moderate at least in the short run. On the other hand, interest expense should continue to decline as farm operators retire debt. In conclusion, a reasonable short term outlook would be for continued decline in farm expenses but at a slower pace than occurred between 1984 and 1986.

Turning to government programs, because loan rates can decline more than target prices between the 1987 and 1990 crop years, the permitted decline in target prices does not necessarily imply a decline in direct government payments to farmers. But, the decline in target prices does imply lower net income for crop farmers unless supply and demand conditions warrant market prices in excess of target prices. The latter,

however, is considered unlikely by most experts. A reasonable estimate of the potential decline in crop farmers' income can be obtained by multiplying 1987 direct payments to farmers by nine percent, the projected decline in target prices. (Due to the timing of farm program payments, 1987 is the first year that will fully reflect the budgetary impact of the 1986 reduction in loan rates.) This multiplication yields $1.4 billion. Note, the decline will be a decline in net income since target prices substantially exceed the cost of production.

Turning to the livestock sector, if equilibrium means anything, it is reasonable to assume that the livestock sector can not maintain its current, historically high returns. A simple exercise will be used to demonstrate the potential impact of a return to "normal" profit levels:

1. Livestock and livestock product prices will decline due to increasing supplies stimulated by current high profits.
2. As mentioned above, in 1986 the ratio of livestock and livestock product prices to feed grain and hay prices was 1.41.
3. If feed grain and hay prices remain at their 1986 value (98 on a 1977 index scale) and if the ratio of livestock and livestock product prices to feed grain and hay prices returns to its 1967-1986 average of 1.10, livestock and livestock product prices will decline 24.7 percent $(1.41 \times 98 - 1.10 \times 98)/((1.41 \times 98 + 1.10 \times 98)/2)$.
4. Using a price elasticity of demand for livestock and livestock products of - 0.55, a 24.7 percent decline in price would be associated with a 13.6 percent increase in quantity of livestock and livestock products. (The elasticity was derived by weighting

the retail elasticities estimated by Huang for major retail livestock and livestock product groups by the proportion of 1985 livestock cash receipts accounted for by the corresponding farm level livestock or livestock product. Thus, the elasticity estimate is crude.)

5. Therefore, livestock sector cash receipts are estimated to decline by 14.4 percent from 1986 levels (1 - ((1 - 0.247)(1 + 0.136))), which reflects the partial offset of a lower price by increased quantity.
6. Livestock sector cash receipts are currently estimated by USDA at $71 billion in 1986. A 14.4 percent decline translates into $10.2 billion. Since no government income-maintenance programs exists for livestock producers, the decline in livestock cash receipts will largely translate into an equivalent decline in livestock sector profits.

Obviously, the analysis is simple. Production of the various livestock products will not expand at the same rate. Thus, prices will decline at different rates. More importantly, dairy, which accounted for 26 percent of livestock receipts in 1985, has a price support program. Nevertheless, the 1985 farm bill permits the Secretary of Agriculture to lower dairy price supports from the current $11.35 per hundredweight to $9.60 per hundredweight by 1990 should CCC purchases exceed 5 billion pounds each year. The above analysis implies such a reduction is likely. The decline in dairy price supports would total 17 percent or almost 70 percent of the decline projected for all livestock and livestock products.

On the other hand, Huang's estimated elasticities are retail elasticities. The elasticities faced by farmers would be more inelastic, which implies an even greater decline in livestock sector profits.

As important as the magnitude of the decline in livestock sector income is its timing. Clearly, the sector will not return to equilibrium in 1987. Nevertheless, current prices for poultry products are below a year ago and current futures price quotes for beef and hogs suggest at least a five and fifteen dollar decline respectively by year's end. The behavior of the ratio of livestock and livestock product prices to feed grain and hay prices since 1967 suggest it will be at least 1989 before equilibrium is reached and it may be as late as 1991. The longer the time before equilibrium is reached, the longer the farm community has to react to lower livestock prices. Most importantly, the longer the adjustment period, the greater the opportunity for livestock producers to "get their house in order" by using livestock profits to retire debt.

In summary, given the crude nature of this analysis, farm income could decline somewhere in the range of $10-15 billion from its 1986 level over the next two to four years as target prices and livestock profits decline. It should be emphasized that major changes in farm policy or several years of weather related production problems either in the U.S. or overseas could significantly alter the projected decline.

Impact of the Projected Farm Income Decline on Farm Financial Stress

Table 2 presents a summary of selected financial statistics for the U.S. farm sector from 1940 through 1986. The data is averaged to smooth

annual variations. Several well-known facts are documented: the growth in residual income to assets and, consequently, the increase in farm asset values from 1940 to 1980, the real capital losses incurred during the 1980s as the rate of income return to assets declined and as the rate of increase in residual income to assets slowed, and the more than doubling of the debt-asset ratio.

In addition to providing a historical perspective, Table 2 can also be used to gain insights into the present and future financial condition of farming. For example, a commonly used model for estimating the value of an asset is the bid-price model. Basically, it values an asset according to the discounted future income the asset is expected to earn. Factors that affect an asset's bid price include the initial income earned by the asset, the rate of change expected over time in the income earned by the asset, the expected rate of inflation, the real rate of interest, and the rate at which income and capital gains are taxed. For an excellent discussion of these factors and their impacts upon the bid price for farmland see Barkema.

As Barkema points out, a change in the initial income earned by an asset results in a proportionate change in the asset's value, assuming the other factors which affect the bid-price model remain constant. This observation is utilized in this analysis because the forecasted decline in residual income to assets results from a movement to economic equilibrium associated with a decline in government income supports for grains and the return of the livestock-feed price ratio to its 1967-1986 average values. In other words, the decline in residual income to assets is a one time adjustment to equilibrium. Furthermore, since the decline in income is

expected to occur over a two to four year period, the other factors which affect the bid price are less likely to change than if a longer period of change in income was being analyzed.

Turning to the numbers, for 1986, residual income to assets is currently estimated at $31.9 billion. However, a $10 to $15 billion decline in farm sector profitability is projected. Using the $10 billion figure, residual income to farm assets becomes $21.9 billion. This translates into a 31 percent decline in residual income and, therefore, through the bid-price model a 31 percent decline in farm asset values. Again, it is worth noting that the projected decline in asset values only reflects the projected decline in farm income due to a decline in government income supports for grains and the return of the livestock-feed price ratio to its 1967-1986 average value.

Currently, USDA projects non-CCC, non-farm household asset values at $692 and $697 billion as of December 31, 1986 and 1987 respectively. The closeness of these estimates after five years of steep decline reflect the belief that the decline in farm asset values is over. However, the projected decline in residual income to farm assets will push asset values lower. Applying the projected 31 percent decline in residual income to farm assets to the December 31, 1987 asset value yields a farm asset value of $481 billion.

Turning to the farm debt issue, what is the implication of the decline in farm asset values for farm debt? An estimate of debt consistent with a given asset level can be obtained by using a specific debt-asset ratio. For this analysis, the average debt-asset ratio during the 1960s and 1970s, 16.1 percent, is used. It may be on the high side

because the decline in asset values during the early 1980s may make farm asset investors more conservative borrowers than during the 1960s and 1970s, when farm assets appreciated in value.

Applying the debt-asset ratio of 16.1 percent to the estimated December 31, 1987 asset value of $697 billion yields a farm debt estimate of $112 billion, excluding farm household and CCC debt. Since the preliminary USDA estimate for December 31, 1987 is $144 billion, this simple exercise suggests that additional debt liquidation is needed at current farm asset and income levels. This conclusion is consistent with the fact that USDA is currently forecasting a decline in non-farm household, non-CCC debt of $14 billion during 1987 while projecting a $5 billion increase in the value of corresponding farm assets.

The projected decline in farm debt becomes even more ominous when the debt-asset ratio is applied to the projected asset value of $481 billion consistent with the projected decline in farm income. The debt estimate becomes $77 billion.

While the projected decline in farm asset and debt levels is large, two factors will moderate the decline and its impacts. First, most research has shown that changes in asset values lag changes in the residual income to assets. Thus, the projected decline in asset values (and farm debt) could take five to ten years to complete. Secondly, eighty to ninety percent of the projected decline in residual income to farm assets will be accounted for by the livestock sector. Yet, as of December 31, 1987 farm real estate is projected to comprise 74 percent of non-farm household, non-CCC debt. Thus, the decline in farm assets will be moderated by the difference between the distribution of the projected

income decline and the distribution of farm assets among the various farm subsectors. However, examination of the 1982 Census of Agriculture reveals that farms with more than 1000 acres account for 24 percent of livestock receipts, and, more broadly, farms with 260 or more acres earned 63 percent of livestock cash receipts. A reasonable assumption concerning current economic behavior among farm operators with livestock operations is that profits from the livestock operation are being used to support land purchases and cash rent values. Thus, as livestock sector profits decline, ability of these operators to support land values will decline.

In summary, additional substantial declines in farm assets and debt levels are forecast. This analysis is too simplistic to forecast specific numbers, but it does suggest that the decline in farm asset values could range as high as 20 to 30 percent of current values and the decline in farm debt could range as high as 40-50 percent of current values. The percent decline in debt is greater because additional debt liquidation is needed to make debt levels consistent with the current level of farm assets. One clear implication is that current estimates for assistance to the Farm Credit System (about $6 billion) are too low. Other implications of the continuing farm crisis for the structure of farming and the politics of farm programs are discussed in the next two sections.

Structural Implications of the Continuing Farm Crisis

The most comprehensive picture of farm stress is provided by USDA's annual farm cost and returns survey. Table 3 presents data from the survey for 1985. A farm under stress is defined as one which had a debt-

asset ratio greater than 40 percent on January 1, 1986 and had a negative cash flow for the farm household during 1985. A more restrictive definition is also used -- a negative household cash flow and a debt-asset ratio greater than 70 percent. The cash flow measure contains allowances for depreciation, principal repayment, family living expenses, and off-farm income.

Most discussions of farm stress have centered on smaller and medium size farms. However, when viewed on a proportionate basis, farms with gross farm sales over $250,000 are experiencing substantially more stress than farms with sales under $40,000 and almost as much as farms with sales of $40,000 to $249,999 (Table 3). The continuing farm crisis will exacerbate the stress experienced by these largest of farms, especially those with sales over $500,000. As discussed previously, livestock operations will be particularly hard hit in the coming years. Data from the 1982 Census of Agriculture reveals that farms with sales over $500,000 are substantially more dependent than the average farm upon receipts from livestock and livestock products (Table 4). Furthermore, since USDA estimates that on December 31, 1985, farms with gross sales over $500,000 accounted for 22 percent of the non-CCC farm debt, excluding operator households, farm lenders could face even more stress in the future due to the large amount of debt owned by the largest farms.

This analysis suggests that the little discussed post-1982 decline in number of farms with gross sales over $500,000 should continue. Between 1982 and 1985, USDA's estimate of number of farms with sales greater than $500,000 has declined from 30,000 to 27,000. This reverses a trend which probably had been in place since World War II. It should be noted that

because total number of farms also declined, proportion of farms with sales over $500,000 remained constant at 1.2 percent.

The other farm sales category with greater than average dependency on livestock sales is farms with sales under $10,000 (Table 4). As livestock and livestock product prices decline, the declining gross receipts of small farmers may push them below the $1,000 threshold necessary to qualify as a farm. Therefore, the number of farms could decline substantially in the coming years simply for definitional reasons.

More broadly, the decline in cash receipts, both from livestock and crops, implies declining farm number in all gross farm sales categories. Already, between 1982 and 1985 number of farms with gross sales over $100,000 has declined from 294,000 to 287,000. Therefore, it would appear that just as inflation in farm prices during the 1970s became an issue in the structure of agriculture, deflation in farm prices during the 1980s will become an equally important question in the structure of agriculture.

In summary, as measured by gross farm sales, a downward shift in the size of farms is expected. The decline in farm size will be most significant for farms with over $500,000 in gross sales. In addition, a substantial exit of the smallest farms is expected due in part to the current definition of a farm. The overall decline in farm size in combination with the expectation that the greatest impact will be felt by the smallest and largest farms suggests that the proportion of farms which are categorized as commercial farms will probably increase but that the proportion of farms with sales over $500,000 will probably decrease.

Political Implications of the Continuing Farm Crisis

The major argument for the lower loan rates contained in the 1985 farm bill was the need to become competitive in world markets. While exports have improved, the improvement to date has not been as robust as many had hoped. However, the lower loan rates have substantially improved the profitability of the U.S. livestock sector. In some respects, the profits being generated today by the livestock sector are similar to those that were generated by the U.S. crop sector during the 1972-74 grain boom. Therefore, the 1985 farm bill, as currently administered, can easily be thought of as the "Full Livestock Production Bill of 1985".

This is not a historical artifact. The seeds for the 1985 farm bill were sown in 1983 and 1984. As Table 1 illustrates, at that time the profitability of the livestock sector was under stress. The stress was caused by increasing feed grain prices, which in turn were caused by the drought of 1983 and by the payment-in-kind land diversion program of 1983. Furthermore, as Table 1 reveals the ratio of livestock to feed grain prices was below the 1967-1986 average every year from 1980 through 1984 except 1982. Quite naturally, livestock producers -- particularly beef and pork producers -- surmised that high grain prices were a major part of their problem. Therefore, it was not surprising that livestock producers became major policy actors in the formation of the 1985 farm bill. They were instrumental in defeating mandatory supply controls for crops, which would have substantially increased the cost of feed, as well as in supporting reductions in loan rates.

This brief history begs an important question. What happens when livestock prices react, as they must, to the existing profits and decline, causing stress in the livestock sector? It will be difficult for livestock producers to argue that high loan rates for feed grains (and soybeans) caused their financial stress. At the same time that livestock producers' profits come under stress, income supports to field crop farmers will begin declining under the 1985 farm bill. This convergence of economic stress will take several years to materialize but it can clearly materialize by the time the 1990 farm bill is debated. The result could be stronger support for mandatory supply controls, particularly if export and/or new uses demand has not increased sufficiently to propel the grain sector into profitability.

Why would livestock producers be more supportive of mandatory supply controls? First, poultry producers would gain relatively more with mandatory supply controls, the reason being their feed efficiency advantage over red meat producers. (The differential impact of price supports upon the different livestock sectors is one of the least-understood and least-researched issues in the current policy debate.) Secondly, many livestock producers are still grain producers of some significance. If both the livestock and field crop sectors are under stress due to low prices and profitability, producers would probably favor increasing prices in one part of their operations. Thus, operators of mixed enterprise farms should be more receptive to mandatory supply controls than they were in 1985. Lastly, political pressure for some form of direct federal assistance may build within the livestock community. Given budgetary limitations, direct federal assistance would appear to be

possible only with cuts in government aid to crop producers. The only politically viable cut in a situation of overall farm stress would be to reduce income payments to field crop farmers by increasing loan rates.

While the above discussion is conjectural, it does suggest that the attempt to rapidly expand exports by substantially reducing loan rates and thereby ward off mandatory supply controls, may instead have established the seeds of economic adaptation which will lead to the political implementation of the opposed program. Such an event would obviously be an ironic delight to historians of policy.

Summary, Conclusion and Implications

Optimism abides in farm country at present for the farm crisis of the 1980s appears to be coming to an end. However, the crisis is not over. Declining government income and price supports and the increasing production of livestock and livestock products in response to the current profits in the livestock sector foretell more hard times.

This stress will bring further declines, probably substantial, in farm asset values and the need to liquidate additional, again probably substantial, farm debt. Thus, current estimates of financial assistance for the Farm Credit System are underestimated. Significant structural changes are also likely -- number of farms will decline, in part for definitional reasons, cash receipts per commercial farm will decline, and the largest farms will become the focus of the next round of farm financial stress. Lastly, the continuing crisis will likely invigorate the forces supporting mandatory supply controls.

Given the potential effects of the continuing farm crisis, we believe contingency discussions and planning are needed. Failure to consider the worst while hoping for the best is management by blinders. We hope the forecasts in this article do not come true, for the pain will be immense and the image of economics as the dismal science will be reinforced. But to ignore the potential for a continuing crisis is to lose valuable time in which to develop a sound policy that can reduce the pain of adjustment to economic hardship. It is this humanitarian side of the dismal science to which we appeal.

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Table 1: Selected Indicators of the Financial Status of Production Agriculture, United States, 1978-1987.

Year	Net Farm Income[a]	Net Cash Farm Income	Government Payments & Loans[b]	Production Expenses Including Farm Household	Ratio of Livestock & Livestock Product Prices to Feed Grain & Hay Prices
	- - - - - - - - - - Billion $ - - - - - - - - - -				
1978	23.3	33.1	3.1	103.2	1.23
1979	22.4	33.4	0.5	123.3	1.29
1980	22.4	34.2	1.7	133.1	1.09
1981	20.4	32.8	5.0	139.4	1.01
1982	24.0	36.8	12.6	140.7	1.21
1983	23.9	37.1	8.5	139.5	0.99
1984	26.4	39.3	7.6	141.7	1.01
1985	31.6	44.0	19.5	136.1	1.11
1986[c]	36.0	49.0	20.1	125.1	1.41
1987[c]	33.0	50.0	16.5	120.0	1.75[d]

[a] Net farm income before inventory adjustments.

[b] Government payments and loans are the sum of direct government payments to farmers plus net Commodity Credit Corporation loans for the year.

[c] Net farm income, net cash farm income, production expenses and government payments and loans are U.S. Department of Agriculture (USDA) preliminary estimates for 1986 and the midpoint of the forecasted range for 1987.

[d] The price ratio is based on the average of prices reported by USDA for January through May.

SOURCES: USDA. Agricultural Statistics: 1982. United States Government Printing Office: Washington, D.C. 1982.

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Table 2. Selected Farm Sector Financial Statistics, United States, 1940-1985.[a]

Year	Total Debt[b,c]	Total Assets[b,c]	Residual Income to Assets	Real Capital Gains	Debt/ Asset Ratio	Income/ Asset Ratio	Real Capital Gains/Asset Ratio
	billion dollars				percent		
1940-1949	7.9	74.3	4.5	1.7	10.6	6.1	2.3
1950-1959	14.6	138.9	4.5	2.9	10.5	3.2	2.1
1960-1969	32.9	211.7	6.2	5.2	15.5	2.9	2.5
1970-1979	81.9	489.9	15.7	30.8	16.7	3.2	6.3
1980-1985	179.7	930.8	20.3	-61.0	19.3	2.2	-6.6
1986	166.6	723.1	31.9	--[d]	23.0	4.4	--[d]

a. Excludes the operator household accounts.

b. Debt and asset used for a given year was the average of beginning and ending debt and asset reported for the year.

c. Excludes Commodity Credit Corporation loans.

d. Not available.

Sources: U.S. Department of Agriculture, Economic Research Service. Agricultural Outlook. AO - 131. June 1987.

U.S. Department of Agriculture, Economic Research Service. Economic Indicators of the Farm Sector: National Financial Summary, 1985. ECIFS 5-2. November 1986.

Table 3. Financial Stress of Farm Households by Farm Size, United States, January 1, 1986.

Gross Farm Sales	Farms with Negative Cash Flow for Farm Household D/A* >70%	Farms with Negative Cash Flow for Farm Household D/A* >40%	All Farms	Farms with Negative Cash Flow for Farm Household D/A* >70%	Farms with Negative Cash Flow for Farm Household D/A* >40%
-----Dollars-----	----------1,000----------			----percent----	
<40,000	24.3	66.1	928.1	2.6	7.1
40,000 - 99,999	22.5	50.2	285.5	7.9	17.6
100,000 - 249,999	22.1	40.0	225.8	9.8	17.7
250,000 - 499,999	5.5	11.5	78.5	7.0	14.6
500,000 +	2.5	4.5	32.4	7.7	13.9
All Farms**	77.5	173.2	1,551.0	5.0	11.2

* D/A: Debt/Asset.

** Individual components may not sum to the all farm totals due to rounding.

Source: U.S. Department of Agriculture, Economic Research Service, Financial Characteristics of U.S. Farms, January 1, 1986. Agriculture Information Bulletin Number 500. August 1986.

Table 4: Proportion of Sales Accounted for by Selected Commodities, by Gross Farm Sales, United States, 1982.

Commodity	Gross Farm Sales: Less Than $10,000	$10,000-39,999	$40,000-99,999	$100,000-249,999	$250,000-499,999	$500,000+	All Farms
	- - - - - - - - Percent - - - - - - - -						
Grains	20.7	37.6	40.0	37.3	31.7	10.1	27.6
Other Crops	22.3	18.7	13.1	13.0	18.1	28.7	19.6
Livestock & Livestock Products	57.0	43.7	46.8	49.7	50.2	61.2	52.8
Total[a]	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a] Total may not add to 100 due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census. 1982 Census of Agriculture: United States - Summary and State Data. Volume 1, Part 51. AC82-A-51. October 1984.